Volume 150 January 1985

CONTENTS

Laminar flow through a slowly rotating straight pipe. KAMYAR MANSOUR *page* 1

Large-scale structures in a forced turbulent mixing layer. M. GASTER, E. KIT and I. WYGNANSKI 23

The influence of the horizontal component of Earth's angular velocity on the instability of the Ekman layer. S. LEIBOVICH and S. K. LELE 41

Natural convection in porous media. V. PRASAD, F. A. KULACKI and M. KEYHANI 89

Fluid motion inside a spinning nutating cylinder. HAROLD R. VAUGHN, WILLIAM L. OBERKAMPF and WALTER P. WOLFE 121

The upstream scale of flow development in curved circular pipes. D. E. OLSEN and B. SNYDER 139

Turbulence suppression in free turbulent shear flows under controlled excitation. Part 2. Jet-noise reduction. A. K. M. F. HUSSAIN and M. A. Z. HASAN 159

Cell-pattern sensitivity to box configuration in a saturated porous medium. B. BORKOWSKA-PAWLAK and W. KORDYLEWSKI 169

Time-domain measurements in separated flows. I. P. CASTRO 183

The self-induced motion of vortex sheets. J. J. L. HIGDON and C. POZRIKIDIS 203

Computations of overturning waves. A. L. NEW, P. MCIVER and D. H. PEREGRINE 233

The structure of a steady high-speed deflagration with a finite origin. D. R. KASSOY and J. F. CLARKE 253

The plane turbulent shear layer with periodic excitation. H. E. FIEDLER and P. MENSING 281

Asynchronous whirl in a rotating cylinder partially filled with liquid. A. S. BERMAN, T. S. LUNDGREN and A. CHENG 311

Some observations of the transition process on the windward face of a long yawed cylinder. D. I. A. POLL 329

Observations of rapidly flowing granular-fluid materials. DANIEL M. HANES and DOUGLAS L. INMAN 357

Couette flow of two fluids between concentric cylinders. YURIKO RENARDY and DANIEL D. JOSEPH 381

A numerical study of water-wave modulation based on a higher-order nonlinear Schrödinger equation. EDMOND LO and CHANG C. MEI 395

Waves at the interface between a clear liquid and a mixture in a two-phase flow. PHOOLAN PRASAD 417

Determining modes and fractal dimensions of turbulent flows. P. CONSTANTIN, G. FOIAS, O. P. MANLEY and R. TEMAM 427

Some observations of the subcritical transition in plane Poiseuille flow. MICHIO NISHIOKA and MASAHITO ASAI 441

Square-pattern convection in fluids with strongly temperature-dependent viscosity. F. H. BUSSE and H. FRICK 451

Wave generation by an oscillation surface pressure and its application in wave-energy extraction. A. J. N. A. SARMENTO and A. F. DE O. FALCÃO 467

Stability of convection rolls in a layer with stress-free boundaries. E. W. BOLTON and F. H. BUSSE 487

REVIEW
Theoretical Glaciology, by K. Hutter 499

CORRIGENDUM 503

INDEX TO VOLUME 150 504